

02/06/2007

ECC 63 Herb Hill Road Glen Cove, NY 11542 **STL Edison** 777 New Durham Road Edison, NJ 08817

Tel 732 549 3900 Fax 732 549 3679 www.stl-inc.com

Attention: Mr. Theodore Johnson

Laboratory Results Job No. C299 - Li Tungsten

Dear Mr. Johnson:

Enclosed are the results you requested for the following sample(s) received at our laboratory on January 26, 2007.

<u>Lab No.</u>	Client ID	Analysis Required
802790	5601-FSS-PC-1027-1	As
		Pb
802791	5601-FSS-PC-1033-1	As
		Pb
802792	5601-FSS-PC-10B1-1	As
		Pb
802793	5601-FSS-PC-10B2-1	As





STL Edison

777 New Durham Road Edison, NJ 08817

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Laboratory Results
Job No. C299 - Li Tungsten (cont'd)

<u>Lab No.</u> <u>Client ID</u> <u>Analysis Required</u>

Pb

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If you have any questions, please contact me at (732) 549-3900.

Very Truly Yours,

Michael Legg Project Manager



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Analytical Results Summary

Client ID: **FSS-PC-1027-1** Lab Sample No: 802790

Site: Li Tungsten Lab Job No: C299

Date Sampled: 01/25/07 Matrix: SOLID Date Received: 01/26/07 Level: LOW

% Moisture: 15.2

METALS ANALYSIS

<u>Analyte</u>	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	<u>M</u>
Arsenic Lead	7.2 42.1	1.1	*	P P

Client ID: **FSS-PC-1033-1** Lab Sample No: 802791

Site: Li Tungsten Lab Job No: C299

Date Sampled: 01/25/07 Matrix: SOLID
Date Received: 01/26/07 Level: LOW

% Moisture: 15.2

METALS ANALYSIS

<u>Analyte</u>	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection <u>Limit</u>	<u>Qual</u>	M
Arsenic	13.3	1.1	*	P
Lead	14.9	0.64		P

Client ID: FSS-PC-10B1-1

Site: Li Tungsten

Lab Sample No: 802792

Lab Job No: C299

Date Sampled: 01/25/07 Date Received: 01/26/07 Matrix: SOLID Level: LOW

% Moisture: 9.5

METALS ANALYSIS

<u>Analyte</u>	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	<u>M</u>
Arsenic	30.4	1.0	*	P
Lead	89.3	0.60		P

Client ID: FSS-PC-10B2-1 Lab Sample No: 802793

Site: Li Tungsten Lab Job No: C299

Date Sampled: 01/25/07 Matrix: SOLID
Date Received: 01/26/07 Level: LOW

% Moisture: 15.6

METALS ANALYSIS

<u>Analyte</u>	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	<u>M</u>
Arsenic	4.3	1.1	*	P
Lead	8.3	0.64		P

General Information

Chain of Custody

Environmental Chemical Corporation 1746 Cole Blvd. Bldg. 21, Suite 350 Lakewood, CO 80401 Phone: (303) 298-7607 Fax: (303) 298-7837	al Corporation			Mark er of Marker of States			COC Number:			
Customer Name: ECC – Li Tungsten Address: 63 Herb Hill Road, Glen Cove, NY 11542	Tungsten I, Glen Cove, NY 115	42		ight in a garden in the con-	000		ECC Project Manager:_Phil O'Dwyer Address: 63 Herb Hill Road, Glen Cove, NY 11542	ger:_Phil OʻDv Hill Road, Gle	wyer in Cove, NY	11542
Contact: Theodore Johnson Phone: (303) 472 - 8834 Fax: (516) 665- 8531	Ē				ころこ		Phone: (614) 402 - 2020 Customer Project Name: Li Tungsten	- 2020 Name: Li Tun	gsten	
SAMPLE NUMBER	DATE	TIME	TYPE	CLIENT SA	CLIENT SAMPLE IDENTIFIER	TIFIER	TESTS	CONTAINER(S)	NER(S)	MATRIX
5601 -FSS-PC-1027-1	1/25/2007	14:15	FSS				051708	1 glas	1 glass jar	Soil
5601 -FSS-PC-1033-1	1/25/2007	14:15	FSS				16208	1 glas	1 glass jar	Soil
5601 -FSS-PC-10B1-1	1/25/2007	14:35	FSS		Bias		802792	1 glas	1 glass jar	Soil
5601 -FSS-PC-10B2-1	1/25/2007	14:55	FSS		Bias		802793	1 glass jar	ss jar	Soil
				¥						
							Lead & Arsenic			
				. ·						
Notes: Ship to: Severn Trent Laboratory, EDISON 777 New Durham Road, Suite 7, Edison, New Jersey, 08817 Phone: 732-549-3900 Request Turnaround Time: 7 Day	itory, EDISON e 7, Edison, New Jers 7 Day	iey, 08817			cħ	70000	Laboratory Receipt Information Cooler/Container Intact? Samples Received At Below 4 C? Samples Containers Intact? Cooler/Container Custody Seal?	Information tact? At Below 4 C? s Intact? ustody Seal?	Yes Yes Yes	0 N O N O O N O O N
			CUSTODY TRANSFER RECORD	ANSFER REC	SORD					
Relinquished By		Company	ď	Date	Time	Received By		Company	Date	Time
Print: Ted Johnson Sign: /	7	ECC	1/25/	1/25/2007		Print:	des			
Print: Fedex			1-26-6	~	940 P	Print: \mathcal{Q}_{\cdot}	Ja Pr	ST		
Print:				g was and		Print:				
				s so-						

Laboratory Chronicles

777 New Durham Road, Edison, New Jersey 08817

Job No:	C299	Site:	Li Tungsten
Client:	ECC	Date Sampled:	1/25/2007
Sample No.:	802790	Date Received:	1/26/2007
		Matrix:	SOLID

Analytic Parameter	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
ARSENIC	1/30/2007	Sanagavarapu, Suguna	1/30/2007	Polidori, Michael	22024
LEAD	1/30/2007	Sanagavarapu, Suguna	1/30/2007	Polidori, Michael	22024

777 New Durham Road, Edison, New Jersey 08817

Job No:	C299	Site:	Li Tungsten
Client:	ECC	Date Sampled:	1/25/2007
Sample No.:	802791	Date Received:	1/26/2007
•		Matrix:	SOLID

Analytic Parameter	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
ARSENIC	1/30/2007	Sanagavarapu, Suguna	1/30/2007	Polidori, Michael	22024
LEAD	1/30/2007	Sanagavarapu, Suguna	1/30/2007	Polidori, Michael	22024

777 New Durham Road, Edison, New Jersey 08817

Job No:	C299	Site:	Li Tungsten
Client:	ECC	Date Sampled:	1/25/2007
Sample No.:	802792	Date Received:	1/26/2007
		Matrix:	SOLID

Analytic Parameter	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
ARSENIC	1/30/2007	Sanagavarapu, Suguna	1/30/2007	Polidori, Michael	22024
LEAD	1/30/2007	Sanagavarapu, Suguna	1/30/2007	Polidori, Michael	22024

777 New Durham Road, Edison, New Jersey 08817

Job No:	C299	Site:	Li Tungsten
Client:	ECC	Date Sampled:	1/25/2007
Sample No.:	802793	Date Received:	1/26/2007
•		Matrix	SOLID

Analytic Parameter	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
ARSENIC	1/30/2007	Sanagavarapu, Suguna	1/30/2007	Polidori, Michael	22024
LEAC	1/30/2007	Sanagavarapu, Suguna	1/30/2007	Polidori, Michael	22024

Methodology Review

Analytical Methodology Summary

Volatile Organics:

Unless otherwise specified, water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Method 524.2 Rev 4.1. Solid samples are analyzed for volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8260B.

Acid and Base/Neutral Extractable Organics:

Unless otherwise specified, water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270C.

GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8260B and 8270C. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

Organochlorine Pesticides and PCBs:

Unless otherwise specified, water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8081A for organochlorine pesticides and Method 8082 for PCBs.

Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

- P Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)
- A Flame Atomic Absorption
- F Furnace Atomic Absorption
- CV Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050B "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method - 200.7/SW846 6010B and for solid matrix - 6010B. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1/7470A and solid Method 7471A. Other specific Atomic Absorption method references are as follows:

Element	Water Test Method <u>Furnace</u>	Solid Test Method <u>Furnace</u>
Antimony	200.9	7041
Arsenic	200.9	7060A
Cadmium	200.9	7131A
Lead	200.9	7421
Selenium	200.9	7740
Thallium	200.9	7841

Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.3. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

Phenols:

Water samples are analyzed for total phenols using EPA Method 420.2. Total phenols are determined in water and solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Hexavalent Chromium:

Water samples are analyzed using EPA Method 7196A, EPA Method 7199 or (upon request) USGS -1230-35. Soil samples are subjected to alkaline digestion via EPA Method 3060A prior to analysis by EPA Method 7196A or EPA Method 7199.

Cleanup of Semivolatile Extracts:

Upon request Method 3611B Alumina Column Cleanup and/or Method 3650B Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability - Method 1020A

Corrosivity - Water pH Method 9040B Soil pH Method 9045C

Reactivity - Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release

Toxicity - TCLP Method 1311

Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 18th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

Data Reporting Qualifiers

ORGANIC DATA REPORTING QUALIFIERS

- ND The compound was not detected at the indicated concentration.
- J Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified quantitation limit but greater than or equal to the method detection limit. The concentration given is an approximate value.
- B The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.
- P For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.
 - * For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

INORGANIC DATA REPORTING QUALIFIERS (SW-846 METHODS ONLY)

- ND/U The compound was not detected at the indicated concentration.
- B Reported value is less than the Practical Quantitation Limit but greater than or equal to the Instrument Detection Limit.
- E The reported value is estimated because of the presence of interference. See explanatory note in the Nonconformance Summary if the problem applies to all of the samples or on the individual Inorganic Analysis Data Sheet if the problem is isolated.
- M Duplicate injection precision not met on the Furnace Atomic Absorption analysis.
- N The spiked sample recovery is not within control limits.
- S The reported value was determined by the Method of Standard Additions (MSA).
- * Duplicate Analysis is not within control limits.
- W Post digestion spike for Furnace Atomic Absorption analysis is out of control.
- + Correlation coefficient for MSA is less than 0.995.
- M Column Method Qualifiers
- P Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP).
- A Flame Atomic Absorption Spectroscopy (FAA).
- F Graphite Furnace Atomic Absorption Spectroscopy (GFAA).
- CV Cold Vapor Atomic Absorption Spectroscopy.

Non-Conformance Summary



Nonconformance Summary

STL Edison Job Number: C299

Client: ECC

Date: 2/5/2007

Sample Receipt:

Sample delivery conforms with requirements.

Metals:

All data conforms with method requirements.

I certify that the test results contained in this data package meet all requirements of NELAC both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Director or their designee, as verified by the following signature.

Michael Legg Project Manager

Metals Forms and Data

Analytical Results Summary

Client ID: FSS-PC-1027-1

Site: Li Tungsten

Lab Sample No: 802790

Lab Job No: C299

Date Sampled: 01/25/07 Date Received: 01/26/07 Matrix: SOLID Level: LOW

% Moisture: 15.2

METALS ANALYSIS

<u>Analyte</u>	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	Qual	M
Arsenic	7.2	1.1	*	P
Lead	42.1	0.64		P

Client ID: FSS-PC-1033-1 Lab Sample No: 802791

Site: Li Tungsten Lab Job No: C299

Date Sampled: 01/25/07 Matrix: SOLID Date Received: 01/26/07 Level: LOW

% Moisture: 15.2

METALS ANALYSIS

<u>Analyte</u>	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection <u>Limit</u>	Qual	<u>M</u>
Arsenic	13.3	1.1	*	P
Lead	14.9	0.64		P

Client ID: FSS-PC-10B1-1 Lab Sample No: 802792

Site: Li Tungsten Lab Job No: C299

Date Sampled: 01/25/07 Matrix: SOLID
Date Received: 01/26/07 Level: LOW

% Moisture: 9.5

METALS ANALYSIS

Analytical Result Instrument Units: mg/kg Detection <u>Analyte</u> (Dry Weight) ___Limit <u>Qual</u> <u>M</u> Arsenic 30.4 1.0 Lead 89.3 0.60 P

Client ID: FSS-PC-10B2-1

Site: Li Tungsten

Lab Sample No: 802793

Lab Job No: C299

Date Sampled: 01/25/07 Date Received: 01/26/07

Matrix: SOLID Level: LOW

% Moisture: 15.6

METALS ANALYSIS

<u>Analyte</u>	Analytical Result Units: mg/kg (Dry Weight)	Instrument Detection Limit	<u>Qual</u>	<u>M</u>
Arsenic	4.3	1.1	*	P
Lead	8.3	0.64		P

Blank Results Summary

BLANKS

цар	Name:	STL_EDISON_		-		
Lab	Code:	12028_	Lab Job No.: _C299		Batch No.:	22024_

Preparation Blank Matrix (soil/water): SOIL_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Cont			Calib (ug/I 2			3	С	 Prepa- ration Blank		
Aluminum_			····				1	Ī		<u> </u>			
Antimony_				i –			i-		•••	- -			N
Arsenic	4.7	ט	4.7	Ū		4.7	ΰ	- I	4.7	ָ ט	0.47	ច ច	
Barium		_ _ ,		1_						-			l l
Beryllium	<u> </u>	_ _ ,					1	i		- i i		-¦-	N
Cadmium		_ _		Ï_			Ϊ_			-i-i		-¦-	l N
Calcium_		_ _ _					[_			- -		-¦-	N
Chromium_		_ _ _		_						- -		_ -	N
Cobalt		_ _ _		_			İΞ			-i-i		- -	N
Copper		_ _ _		_			<u> </u> _			[-i-	N
Iron	·	- - -		_			1_					_ _	ĺΝ
Lead	2.7	ַ ט	2.7_	ן ט		_2.7_	U		_2.7_	ט	0.27	0 U	ĺΙP
Magnesium		- - -		<u> _</u>			_	<u> </u>		_ _		Ì	N
Manganese		- - -		_		··	_			. _	1		N
Mercury Nickel	2.4	- - -		_			!_			. _		_ _	N.
Potassium		- u -	2.4_	U		2.4_	U		_2.4_	ַן ט	0.24	ס ס	P
Selenium		- -		-			_			. _		_ _	N.
Silver		- - -		-			_	ļ		. _		_ _	N]
Sodium :		- - -	· · · · · · · · · · · · · · · · · · ·	-				ļ		. _		_ _	N
Thallium		· - -		-			-	ļ		-		_ _	N
Vanadium		· - -					-		***			_ _	NI
Zinc		· - -		-			 –			-		_[_[N
Molybdenu		- -		-			-	<u> </u>		-		_ _	NI
-		- -		-			-			-		- -	NI

BLANKS

Lab Name:	STL_EDISON	J	_			
Lab Code:	12028_	Lab Job No.:	_C299	701)	Batch No.:	22024_
Preparati	on Blank Ma	atrix (soil/wat	er):			
Preparati	on Blank Co	ncentration Un	its (ug/L or mo	g/kg):		

Analyte	Initial Calib. Blank (ug/L)	С	Cont	uing Calib ank (ug/L 2		C	 Prepa- ration Blank	M
Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Molybdenu			2.7					NR

Calibration Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab	Name:	STL_EDISON	

Lab Code: 12028_ Lab Job No.: C299 _____ Batch No.: 22024_

Initial Calibration Source: INORG VENT__

Continuing Calibration Source: INORG VENT__

Concentration Units: ug/L

Analyte	Initia True	al Calibr Found		 True	Continui: Found			%R(1)	N
Aluminum_						<u> </u>	<u>. </u>		NF
Antimony_						i		i	I NE
Arsenic	5000.0	4914.39	98.3	5000.0	4877.41	97.5	4944.41	98.9	P
Barium			i –		i 	i – -		-"	NE
Beryllium						i i			NE
Cadmium						i			NR
Calcium						i i			NR
Chromium_								i	NR
Cobalt									NR
Copper						i I		¦	NR
Iron									NR
Lead	_10000.0	9865.15	98.7	_10000.0	9852.70	98.5	9989.86	99 9	P
Magnesium			_						NR
Manganese									NR
Mercury									NR
Nickel	2500.0	_2481.80	99.3	2500.0	2470.63	98.8	2504.91	100.2	P
Pocassium			i j			-			NR
Selenium_									NR
Silver									NR
Sodium									NR
Thallium_									NR
Vanadium_									NR
Zinc									NR
Molybdenu			i						NR
	_								1410

⁽¹⁾ Control Limits: Mercury 80-120; ICP Metals 90-110; Furnace AA Metals 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab	Name:	STL EDISON	

Lab Code: 12028_ Lab Job No.: C299 _____ Batch No.: 22024_

Initial Calibration Source: INORG VENT__

Continuing Calibration Source: INORG VENT

Concentration Units: ug/L

Analyte	Initial Calibration True Found %R(1)			Continuing Calibration True Found %R(1) Found %R(1)					
			010(1)	l	round	2K(T)	Found	%R(1)	
Aluminum_						İ		<u> </u>	N
Antimony_			i						N
Arsenic				5000.0	4992.88	99.9	4937.38	98.7	P
Barium			<u> </u>	i	i —			-""	N
Beryllium									N
Cadmium									N
Calcium									N
Chromium_									N
Cobalt									N
Copper					·				N
Iron									N
Lead		·		10000.0	10055.25	100.6	9961.62	99.6	P
Magnesium				_			-	-"	N
Manganese _									N
Mercury									N
Nickel			i	2500.0	2513.41	100.5	2503.27	100.1	P
Potassium					_			200.1	N.
${ t Selenium}_{-} _{-}$									N
Silver									N
Sodium						i			N
[hallium]									N
/anadium_									N
Zinc _									N
Molybdenu									N

(1) Control Limits: Mercury 80-120; ICP Metals 90-110; Furnace AA Metals 80-120

ICP Interference Check Results Summary

ICP INTERFERENCE CHECK SAMPLE

ICP ID Number: TRACE1 TJA61 ICS Source: INORG VENT__

Concentration Units: ug/L

			1 -			1			
	Т	rue	Initial Found			 Final Found			
	Sol.	Sol.	Sol.	Sol.		Sol.	ia		
Analyte	A	AB	A	AB	%R	A	Sol. AB	%R	
Aluminum	500000	500000	485130	_487160.6	1 97 4	401056	100000 0	T 00 0	
Antimony		100	-103130	112.5			! —	!	
Arsenic		100	i——	98.3			115.2	115.2	
Barium -		100		107.5			97.6	· —	
Beryllium		100	i — —	101.2	1		109.4		
Cadmium		100		97.5			102.3	102.3	
Calcium	500000		498616			F02224	99.6	_99.6	
Chromium		100		97.5	· —	_502234	_504378.6		
Cobalt		100		98.0	I	ļ ———	99.5	! 	
Copper		100		104.3	1	ļ——	99.4	_99.4	
Iron	200000		208179	207711.2			103.7		
Lead	·	100			96.5	-208816	! =		
Magnesium	500000	500000	535324	_534088.2	1106 0	538002		100.8	
Manganese		100		_	100.3	_538002	: -		
Mercury					1 100.5		100.8	100.8	
Nickel		100		102 1	102.1	· · · · · · · · · · · · · · · · · · ·	100 4		
Potassium					102.1 		102.4	102.4	
Selenium		100		97.5	97.5				
Silver -		100		105.6			92.6	_ '	
Sodium					103.6		105.2	105.2	
Thallium		100		100.4	100.4				
Vanadium		100		99.2	99.2		95.3	_95.3	
Zinc		100		106.4				101.8	
					100.4		106.2	106.2	
						ı		ř	

Spike Sample Recovery Summary

SPIKE SAMPLE RECOVERY

Lab Name: STL_EDISON	1	BSS013007
Lab Code: 12028_	Lab Job No.: C299	Batch No.: 22024_
Matrix (soil/water):	SOIL	Level (low/med): LOW

% Solids for Sample: 100.0

Analyte	Control Limit %R	Spiked Sample Result (SSR) (Sample Result (SR)	С	Spike Added (SA)	%R	Q	 M
Aluminum_				T			-	NR
Antimony_				i-i			i –	NR
Arsenic	75-125_	200.5132	0.4700	ן ט	200.00	100.3	-	P
Barium	ll			Ìί				NR
${\tt Beryllium}$				i^-i		-	_	NR
Cadmium				'i-i			i –	NR
Calcium_	<u> </u>			i-i			i –	NR
Chromium_				1-1		-	-	NR
Cobalt				i^-i			-	NR
Copper				i^-i			_	NR
Iron				i ⁻ i			—	NR
Lead	75-125_	50.7050_	0.2700	ן ט	50.00	101.4		Р
Magnesium				İİ		- i	_	NR
Manganese							i – i	NR
Mercury				-			_	NR
Nickel	75-125_	51.0080_ _	0.2400	0	50.00	102.0	- i	P
Potassium				1_1		i	_	NR
Selenium_				$ \Box $				NR
Silver						i	_	NR
Sodium							-i	NR
Thallium_				$ \Box $			_i	NR
Vanadium_							-i	NR
Zinc							_	NR
Molybdenu				1 – j	·		_i	NR

Comments:				
	 	 	 	
	 	 	 	

SPIKE SAMPLE RECOVERY

Lab Name: STL_EDISON	803377MS
Lab Code: 12028_ Lab Job No.: C29	9Batch No.: 22024_
Matrix (soil/water): SOIL	Level (low/med): LOW_
% Solide for Sample as a	

% Solids for Sample: _82.9

Analyte	Control Limit %R	Spiked Sample Result (SSR) (Sample Result (SR)	С	Spike Added (SA)	&R	Q	 M
Aluminum_							-	NR
Antimony_				-			 –	NR
Arsenic_	75-125_	220.6244	6.8979	-	241.25	88.6	—	P
Barium								NR
Beryllium				-i			¦ —	NR
Cadmium_				-			-	NR
Calcium_							-	NR
Chromium_				_			-	NR
Cobalt				_				NR
Copper				_ i			-;	NR
Iron	==			_				NR
Magnesium	75-125	110.4343_	54.9300	Ξľ.	60.31	92.0	-	P
Manganese				_			-	NR
Mercury				_[]			- 1	NR
	75 125			_ _			-	NR
Potassium	75-125_	87.2396_	32.6591	_ _	60.31	90.5	-i	Ρİ
Selenium				_ _			-i	NR
Silver	·			_ _			_ i	NR
Sodium				_ _			_ i	NR İ
Thallium	 -		.	_ _			_	NR
Vanadium				_!_			_ j.	NR
Zinc			-	_!_			_[:	NR
Molybdenu	-			_ _			_[:	NR
	-			_ _		-1	- [:	NR

Comments:	
	

Sample and MS Duplicate Results Summary

LAB SAMPLE NO.

DUPLICATES

Lab Name: STL_EDISON	LCSSD051-D
Lab Code: 12028_ Lab Job No.:C299	Batch No.: 22024_
Matrix (soil/water): SOIL_	Level (low/med): _LOW
% Solids for Sample: 100.0	% Solids for Duplicate: _100.0

			Т		-,	1		ī
	Control							
Analyte	Limit	Sample (S)	c	Duplicate (D)	Сļ	RPD	Q	М
Aluminum			-		-		-	NR
Antimony			-i i		-		-	NR
Arsenic		249.5056	-	253.9480	-	1.8	-	P
Barium -		i	i i		-¦		-	NR
Beryllium			-i i		-		-	NR
Cadmium			-		-		\ <u> </u>	NR
Calcium			-		-	ļ	-	NR
Chromium			-		٠¦		-	NR
Cobalt			-i i		-	i ——— i	-	NR
Copper			-		-			NR
Iron			−i i		-¦	-		NR
Lead		138.3744	−i i	142.2036	- i	2.7		P
Magnesium			−i i				-	NR
Manganese			-		-i		1-	NR
Mercury			−i i		-i		-	NR
Nickel		104.5090	−i i	107.9010	- i	3.2	-	P
Potassium			−i i		-i		-	NR
Selenium_			-		-		-	NR
Silver			-i i		-		-	NR
Sodium			<u> </u>		-		-	NR
Thallium_			_		-		-	NR
Vanadium_			_		-		i^-i	NR
Zinc			_		<u> </u>		-	NR
Molybdenu			_11		_ i i		-	NR
			_11		- i i	·	i – i	

DUPLICATES

T. I. W	803377D
Lab Name: STL_EDISON	

Lab Code: 12028_ Lab Job No.: __C299 _____ Batch No.: 22024_

Matrix (soil/water): SOIL_ Low_ Level (low/med): LOW_

% Solids for Sample: _82.9
% Solids for Duplicate: __82.9

Analyte	Control Limit	 Sample (S)	C	Duplicate (D)	C	RPD		M
Aluminum_			-			ļ	-	NR
Antimony_			i		-			NR
Arsenic		6.8979	i	7.3590	i Ti	6.5		P
Barium_			i – i i		i-i		-	NR
Beryllium			i		-	i	—	NR
Cadmium					-		-	NR
Calcium_					i-i		-	NR
Chromium_					i-i		-	NR
Cobalt			_		[-	-	NR
Copper			_		i – i i		i i — i	NR
Iron			_		<u> </u>		-	NR
Lead	!!	54.9300	_	75.5484		31.6	*	Р
Magnesium			_				ĺĺ	NR
Manganese Mercury			_		_			NR
Nickel			-		_		1[[NR
Potassium		32.6591	-!!	34.3715	_!!	5.1_	$ \bot $	P_
Selenium			-		_!!			NR
Silver			-!!		_[]		! — !	NR
Sodium			-		_!!			NR
Thallium			-		_		!!	NR
Vanadium			-		-!!		!!	NR
Zinc			-		-		! — !	NR
Molybdenu			- .		-[]		! !	NR
- -			- -		-!!		!_!	NR

Laboratory Control Samples Results Summary

LABORATORY CONTROL SAMPLE

Lab Name:	STL_EDISO	<u> </u>	 		
Lab Code:	12028_	Lab Job No.:C299	 Batch	No.:	22024_
Solid LCS	Source:	ERA			
Aqueous LO	S Source:				

_	Aque	eous (ug/L)	Solid (mg/kg)					
Analyte	True	Found	₹R	True	Found	C	Limi	.ts	%R
Aluminum_				<u> </u>		ΙÏ			1
Antimony_		i-			· · · · · · · · · · · · · · · · · · ·	- -			l
Arsenic				289.0	249.5	- -	234.0	344.0	86.3
Barium_		i	-			- -			_00.3
Beryllium						- -	- -		
Cadmium_						- -			
Calcium_						- -			
Chromium	i					- -			
Cobalt						- -			
Copper					· · · · · · · · · · · · · · · · · · ·	- -	 -		
Iron						- -			
Lead				158.0	138.4	¦-¦-	129.0	107.0	
Magnesium		-			130.4	- -	— 129.0¦-	187.0	_87.6
Manganese					·	- -		 ;	
Mercury						- -		 !	
Nickel				120.0	104.5	- -	99.1	7.41	
Potassium								141.0	_8/.1
Selenium						- -			
Silver			·	—— -		- -			
Sodium						- -			
Thallium				-		- -	<u>-</u>		
Vanadium				-		- -			
Zinc	·			 [-		- -			
Molybdenu	-			<u> </u> _		- -			
	-					- -			

Serial Dilution Summary

LAB SAMPLE NO.

ICP SERIAL DILUTION

Lab Name: STL_EDISON	803377L
Lab Code: 12028_ Lab Job No.: _C299	Batch No.: 22024_
Matrix (soil/water): SOIL_	Level (low/med): LOW

Concentration Units: ug/L

	1		<u> </u>	,		
		Serial	- 1	8		
	Initial Sample	Dilution		Differ-		
Analyte	Result (I) C	Result (S)	C	ence	Q	M
					_	<u> </u>
Aluminum_			_1			NR
Antimony_			_[ĺ	1	NR
Arsenic	28.59	23.50	Ū	100.0	j -	Р
Barium			ĺ	i – i	-	NR
Beryllium			-i		-	NR
Cadmium			-		-	NR
Calcium				[¦-	NR
Chromium	i - i - i		_	ii	1	NR
Cobalt	<u> </u>		-		-	NR
Copper			-	i — —	-	NR
Iron			-¦		-	NR
Lead	227.68	222.98	-i	2.1		P
Magnesium	i — i – i – i	 	-¦		1-	NR
Manganese	i — i — i — i — i		-		-	NR
Mercury			-		-	NR
Nickel -	135.37	136.14	Б	0.6	¦-¦	P
Potassium			_	°°°-	-	NR
Selenium			-		-	NR
Silver			-		-	NR
Sodium		-	-		-	NR
Thallium			-		-	NR
Vanadium					-	NR
Zinc			-			NR
			-	<u> </u>	-	MK
I	!_ _		_	1	1 1	j

Analysis Run Log

ANALYSIS RUN LOG

Lab	Name:	STL_EDISON	Contract:	

Lab Code: 12028_ Case No.: ____ SDG No.:22024_

Instrument ID Number: TRACE1 TJA61_ Method: P_

Start Date: 01/30/07 End Date: 01/30/07

												·· ·-		Aı	na.	ly	te						_					
Lab	5/5	<u> </u>			_	7 =	1 -	1 - 1		· - 1																		
Sample No.	D/F	Time]	% R	A		A	В		C	C	C	C	C		P	M	!	Н	,	K	•	A			V		M
1 10.		l	ļ		-	l B	15	A	E	D	Α	ļ K	0	U	Ε	В	G	N	G	I		E	G	Α	L	ļ	N	0
1CAL-BLK	1.00	1647	i		$- _{\overline{x}}$	X	<u>x</u>	X	x	<u>_</u>	\bar{x}	x	\bar{x}	x	x	<u>x</u>	_ x	_ X	-	$\frac{1}{x}$	-	x	x	-	x	$\bar{\mathbf{x}}$	<u>_</u>	 X
T1CAL1	1.00	1652	i —		- x	1	X	X		X	X		X	X		X	X	X	-	X	-	X	X	-	X	X	X	X
T1CAL2	1.00	1657	-	·	- x		Х	Х	Х	х	X		Х	X		X	X	X	-	X	—	X	X	-	X	X	X	X
T1CAL3	1.00	1702			_ !	X	Х			х	X		Х			Х	Х		-	X	-	X	X	—	X	X	X	
ZZZZZZ	1.00	1711			_ _		İ								**				-	**	-			¦ – ¦	1	21	1 1	^
ICV/CCV	1.00	1716	i —		- i	i-	\bar{x}	-		-	-	-	-	_	-	x	¦ —	-	-	X	-:	_	-	-	-	-	-	-
ICB/CCB	1.00	1721			- -	_	X	i – i		-	_	-	-		-	X	—	-		X	-	-	-			-	-	-
ICSA	1.00	1726	i —		-i-	-	Х	-		-	_	-	-	-	-	X			_	X	-	-	-	-	-	-	-	-
ICSAB	1.00	1732			- -	i-	X	-	-	-	_	-	-	-	-	Х	-	-	-	X	-	_	-	-		-	-	-
ZZZZZZ	1.00	1738			-i-	i –		-	-	-	-	-	-	-			-	-		1	-	_	-	-		-	-	-
ZZZZZZ	1.00	1744	i —		-j-	-	i – i	-	-1	-		-	-	-	—	-	-	-	-		¦-¦	-	-	-		-	-	-
ZZZZZZ	1.00	1749	i —		-	i-	-	-	-		- ¦	-	-	-	-	-	-	-	-		-	-	-	-		-	-	—
SS013007	1.00		i —		-j-	-	$\bar{\mathbf{x}}$		-	-	-		-	-	-	x		-	-	\bar{x}	-	-	-	-	-		-	-
BS013007	1.00		ļ 		-¦-	i —	X	-	-	-	-	-	-	-		X	-	-	-1	X	-	-	-	-	-		-	-¦
LCSSD051	2.00	1804	i —		- ¦-	- 	х	-1	-1	-	-	-	-1	_	-	X	-	-¦	- ¦	X	-	-	'-¦	-		-	-	-
SSD051-D	2.00	1810			- -	-	х	-	-	-1		-	-1			X	-	-	-	x	-	-		[-	-	-	
798581	2.00	1815	i		- -		x	-1		-	-	-	-1	-¦	-	21	-¦	-	-	^	-	-		-	-1	-	-	
ccv —	1.00	1820	! <u>-</u>		- -	i –	х	-	-¦		-	-	-	!	-1	$\bar{\mathbf{x}}$	-		-	$\bar{\mathbf{x}}$	-		-	-	-!		-	-
CCB	1.00	1825			- -	-	x		-1	-1	-	-¦	-1	-¦	-	X	-¦	-		X	-	-[-	-	
803377D	2.00	1831	-	_	-¦-	-	X	-	-	-	-	-	-	-	-	X	-	-	-	X		-	-	-	-	-	-	-
803377	2.00	1836			-¦-	-	x	-	-1	٦¦	-	-	-1	-1	-	x	-¦	-	-1	^	-	-	-1	-	-		-	-
803377L	2.00	1841			-¦-	-	x	-¦	-	-	-¦	-¦	-	-	-	X	-	-[-	\mathbf{x}	-	-	-		-	-	-	-
803377MS	2.00	1846			- -	-	X	-1	-1	-¦	-[-	-1	-1	-	X	-	-	_ '	\mathbf{x}	-	-		-	-	-	-	-
ZZZZZZ	2.00	1852			- ¦-	-		-1	-	-	-¦	-¦	-¦	-!	-	^	-	-	-	^	-	-¦	-	-	-¦	-	-	-
791140		1857			-	-	-	-	-¦	-	-	-¦	-¦	-	-	-	-	-	-	$\bar{\mathbf{x}}$	-		-	-	-	-¦	-!	-
791141	2.00	1902			-	-	-	-	-	- -	-	-	-	-	-	-		-1	-	\mathbf{x}	-		-	-	-	-¦	-	-
800083		1907			-	-	$\bar{\mathbf{x}}$		-¦	- -	-	-¦	-¦	-	-	-	-	-	-¦	^	-		-	-¦		-	-{	-{
802790	2.00	1913			- -	-	X	-	-¦	- -	-1	-	-	-	-¦	$\frac{1}{x}$	-	-	-¦	-	-		-	-		-	-¦	-
802791		1918			-¦-¦		X	-	-	-1	-	-	-¦	-¦		χİ	-	-	-	-	-	-	-	-	-		- -	-
ccv —	··············	1923			-[-[x		- -	- -	-	-[- -	-	 :	χ	-¦	-¦	-	$\frac{1}{x}$	-	-	-¦	-	-	-	-	-
CCB		1928			-¦-¦		x		- -	- -		-¦	- -	-	- !	X	-	- -	_ !	<u>^</u>	- -			- -	-	- -	.	-
802792		1934			-¦		x	- -	- :	- -	- -	- -	-	-	!	X	-		-¦	4	- -	-	-¦	- -	- -	- -	- -	
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ANALYSIS RUN LOG

Lab	Name:	STL_EDISON	Contract:

Lab Code: 12028_ Case No.: _____ SAS No.: ____ SDG No.:22024_

Instrument ID Number: TRACE1 TJA61_ Method: P_

Start Date: 01/30/07 End Date: 01/30/07

1		· · · · · · · · · · · · · · · · · · ·	1																									
 Lab			[]		Analytes																							
Sample	D/F	Time	 %-	R	A	s	A	В	ΙR	C	C	C	C	C	l E	P	M	M	Tr	N	12	l c	A	N	T	ΙV	7	M
No.	2, -	1 11110	"	1.	L		S			D								N			1 ~	E		A		^		O
i			i		-	-	1	1	1		Ω	10	ľ	١٠	*	-	١٩	114	9	+		<u>E</u>	٦	^	"		I IN	ΙΟ.
802793	2.00	1939			¦	-	x	-	-	l-l	-	-		-	-	x	-	-	 	—	—	-	¦-	¦-	—	-	-	-
803376	2.00	1944			1-	–	Х	-		-		_	-	—	—	X	-	—	-	-	-	-	¦-	-	—	—	-	-
803378	2.00	1949			1-	-	Х	—	-	-	_		-	-	-	X	-		-	-	-	-	—	-	-	—	—	-
803379	2.00	1955			i -	i –	X	i –	_	-	_	_	i –	-	-	X	i –	—	-	i –	-	-	-	¦	¦-	-	-	-
803380	2.00	2000			-	-	X	-	-	-	_	_	-		—	X	-	—	-	—	¦-	-	i –	—	—	-		-
803381	2.00	2005			-	i-	X	—	-	-	-	-	¦ –	¦-	-	X	-	-		-	-	-		-		¦ —	—	-
803382	2.00	2010			i-	i –	Х		-		-	-	—		-	X	¦ –	-	-	-		-	-	-	-	-	¦ —	¦
803383	2.00	2016					X	—	-	-	-			—	—	X	—	—		—	-	_	-		-	— <u> </u>	-	-
803392	2.00	2021			-	—	Х	-	-	-	-	-	-		¦	X	¦ —	-	-	-	-	_	—	-	-	-	—	-
ccv —	1.00	2026			-	i –	X	_		-	¦	-	-	-		X	-	-	-	x	-	_	—	-	-	-		-
ССВ	1.00	2031			-	-	X			-	-	-			—	X	-		-	X	-	_	-			-	-	-
803393	2.00	2037			-	-	X	-	-	-1	-¦	-	_	-	—	X			-	Α.	-		-	-	_	 	_	-
803394	2.00	2042			-		X	-	-	-	-		-	-	-	X	-	-	-	-	-	-	<u> </u>	-		_	_	-
803395	2.00	2047			¦-	-	Х	-		-	-		-	-	-	X	-		-		-	-	-	-	-		-	-
ICSA	1.00	2052			-	-	Х		-¦	-1	-¦	-	-	-	-	X			-	x	-		-	-	-	-	-	
ICSAB	1.00	2058			-	-	X	-	-	-	-¦	¦	-	-		X	-		-1	X		-	 -	-	-			-
CCV	1.00	2103			-	-	Х	-	-1	-¦	-	-	-1		-	X	-	-	-	X	-	-	-	-	-		-	-
ССВ	1.00	2108			-	-	Х	-	-	-	-	-¦	-		-	X	-	-	-	X	-	-	-	-			-	ı — ¦
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